AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A wireless communication system comprising:

a radio module operable to communicate data between a host and at least one external device;

at least one digital module operable to process data communicated by said radio module;

a clock generator for generating first and second clock signals for use by said digital module; and

power management logic operable to:

control said clock generator to cause said clock generator to generate said first clock signal when said wireless communication system is operating in a first power mode and to generate said second clock signal when said wireless communication system is operating in a second power mode; and

calibrate the frequency of said clock generator while said wireless communication system is operating in said second power mode.

2. (Original) The wireless communication system of claim 1 wherein said radio module is turned on when said wireless communication system is operating in said first power mode.

3. (Original) The wireless communication system of claim 2, wherein said first clock signal is a high-speed clock generated by said clock generator when said radio module is turned on.

4. (Original) The wireless communication system of claim 2, wherein said first clock signal is generated by a crystal and a phase-locked loop.

5. (Original) The wireless communication system of claim 1, wherein said radio module is turned off when said communication system is operating in said second power mode.

6. (Original) The wireless communication system of claim 5, wherein said second clock signal is a lower frequency clock that is generated by said clock generator when said radio is turned off.

7. (Original) The wireless communication system of claim 5, wherein said second clock signal is generated by a low-power oscillator.

8. (Original) The wireless communication system of claim 1, further comprising a timer operable to count clock cycles of said first and second clock signals.

9. (Original) The wireless communication system of claim 8, further comprising a timer management module operable to maintain a cumulative count of the number of clock cycles counted by said timer during a predetermined time interval.

10. (Original) The wireless communication system of claim 9, wherein said timer is operable to count the number of clock cycles for said first clock when said wireless communication system is operating in said first power mode and is further operable to count the number clock cycles for said second clock signal when said wireless communication system is operating in said second power mode.

11. (Original) The wireless communication system of claim 10, wherein the number of clock cycles counted by said timer when said wireless communication system is operating in said second power mode is converted to an equivalent number of clock cycles that would have been generated by said first clock by using an adjustment factor based on the number of cycles said first clock would generate during a single cycle of said second clock.

12. (Currently Amended) The wireless communication system of claim 9, wherein said timer is operable to count the number of clock cycles for said first clock when said wireless communication system is operating in said first power mode and said timer does not count the number of clock cycles for said first ~~second~~ clock signal when said wireless communication system is operating in said second power mode.

13. (Original) The wireless communication system of claim 12, wherein said timer management module is operable to generate updated timing information using information provided by said power management logic regarding the duration of the time interval that said wireless communication system is operating in said second power mode.

14. (Currently Amended) A method of managing power in a wireless communication system having a radio module operable to communicate data between a host and at least one external device and at least one digital module operable to process data communicated by said radio module, the method comprising:

generating a high-frequency first clock signal for use by said digital module when said wireless communication system is operating in a first power mode and a lower frequency second clock signal for use by said digital module when said wireless communication system is operating in a second power mode; and

using power management logic to:

control said clock generator to cause said clock generator to generate said first clock signal when said wireless communication system is operating in a said first power mode and to generate said second clock signal when said wireless communication system is operating in said second power mode; and

calibrate the frequency of said clock generator while said wireless communication system is operating in said second power mode.

15. (Original) The method of claim 14 wherein said radio module is turned on when said wireless communication system is operating in said first power mode.

16. (Original) The method of claim 15, wherein said first clock signal is a high-speed clock that is generated by said clock generator when said radio module is turned on.

17. (Original) The method of claim 15, wherein said first clock signal is generated by a crystal and a phase-locked loop.

18. (Original) The method of claim 17, wherein said radio module is turned off when said communication system is operating in said second power mode.

19. (Original) The method of claim17, wherein said second clock signal is a lower frequency clock that is generated by said clock generator when said radio is turned off.

20. (Original) The method of claim 19, wherein said second clock signal is generated by a low-power oscillator.

21. (Original) The method of claim 14, further comprising using a timer to count clock cycles of said first and second clock signals.

22. (Original) The method of claim 21, further comprising using a timer management module to maintain a cumulative count of the number of clock cycles counted by said timer during a predetermined time interval.

23. (Original) The method of claim 22, further comprising using said timer to count the number of clock cycles for said first clock when said wireless communication system is operating in said first power mode and using said timer to count the number clock cycles for said second clock signal when said wireless communication system is operating in said second power mode.

24. (Original) The method of claim 23, wherein the number of clock cycles counted by said timer when said wireless communication system is operating in said second power mode is converted to an equivalent number of clock cycles that would have been generated by said first clock by using an adjustment factor based on the number of cycles said first clock would generate during a single cycle of the said second clock.

25. (Currently Amended) The method of 22, wherein said timer counts the number of clock cycles for said first clock when said wireless communication system is operating in said first power mode and said timer does not count the number of clock cycles for said first ~~second~~ clock signal when said wireless communication system is operating in said second power mode.

26. (Original) The method of claim 25, further comprising using said timer management module to generate updated timing information using information provided by said power management logic regarding the duration of the time interval that the wireless communication system is operating in said second power mode.